

### **REMARKS**

Reconsideration and allowance of the subject application are respectfully requested. Applicants thank the Examiner for total consideration given the present application. Claims 1-12 and 14-17 were pending prior to the Office Action. No claims have been added through this reply. Claims 1-3 and 5-11 have been canceled without prejudice or disclaimer of the subject matter included therein. Therefore, claims 4, 12, and 14-17 are pending. Claims 4 and 12 are independent. Applicants respectfully request reconsideration of the rejected claims in light of the remarks presented herein, and earnestly seeks a timely allowance of all pending claims.

#### **Allowable Subject Matter**

Applicants appreciate that claim 4 is indicated to be allowed.

#### **Claim Rejection - 35 U.S.C. § 102(b)**

Claims 12 and 14-17 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Miyazaki et al. (U.S. Patent 5,969,784). Claim 12 stands rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Kijima et al. (U.S. Patent No. 6,259,500). Applicants respectfully traverse these rejections.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02*. Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, Miyazaki and Kijima fail to teach or suggest each and every claimed element.

#### **Argument: Features of claim 12 are not taught by cited prior art:**

Independent claim 12 has been amended to include additional limitations. More specifically, claim 12 as amended recites, *inter alia*, "the upper portion of said first spacer

portion has a groove surrounding said second spacer portion in a plan view, and the width of the groove being in the range of from 0.2 $\mu$ m to 2 $\mu$ m.” *Emphasis added.*

As discussed before in the Reply filed on May 22, 2009 (see page 13), an upper surface of a portion corresponding to a first spacer portion in interlayer insulating layer 95 (that will be referred to as “lower portion”) is shown as being serrated in a cross-sectional view (see Figure 11B of Kijima). This only shows that the upper surface of the lower portion is rough, not that there is a “groove” surrounding a portion that protrudes in the shape of a plateau in the upper section of interlayer insulating layer 95. The reason why the upper surface of the lower portion of interlayer insulating layer 95 of Kijima is rough in such a manner is that this surface is used to form reflection electrode 19. A process of making a concave/convex structure of the surface where reflection electrode 19 is formed is illustrated in Figures 5A and 5B of Kijima (col. 12, lines 1-13). This illustration shows that the concavity/convexity on the surface where reflection electrode 19 is formed results from convex portions 14a and 14b provided in advance. A process of making convex portions 14a and 14b is illustrated in Figures 4B and 6A-6D (line 53 of col. 10 through line 61 of col. 11), and it can be seen that each of convex portions 14a and 14b is a rounded-mountain-shaped member that is circular as seen from above (in particular, col. 11, lines 57-59). Therefore, it is clear that there is no groove in the upper surface shown as having a serrated cross-sectional shape in interlayer insulating layer 95 in Fig. 11B.

While Applicants clearly illustrated how the Examiner had a false perception of what Kijima discloses in the Reply filed on May 22, 2009, Applicants have further clarified the structure the claimed apparatus (*i.e.*, the claimed groove) in order to move prosecution forward. More specifically, the claimed groove is now clearly claimed as a groove that has a defined width, which now overcomes the Examiner’s overly broad interpretation. Therefore, Kijima’s concave/convex structure is not a (single) groove with a defined width. Thus, Kijima fails to explicitly disclose that the claimed width of the groove being in the range of from 0.2 $\mu$ m to 2 $\mu$ m. Further, Miyazaki fails to also disclose that the claimed width of the groove being in the range of from 0.2 $\mu$ m to 2 $\mu$ m

The claimed invention provides numerous benefits over prior art. For example, at least the following benefits are provided by the claimed invention:

1) Provision of the groove surrounding the second spacer portion makes the first spacer portion less likely to be affected by deformation of the second spacer portion when the second spacer portion elastically deforms. Therefore, the function that is originally intended, *i.e.*, the function of following a change in the volume at the second spacer portion and being subjected to an excessive load at the first spacer portion, is fulfilled more easily.

2) Provision of the groove surrounding the second spacer portion allows the first spacer portion and the second spacer portion to be designed in a smaller space.

3) The width of the groove surrounding the second spacer portion is set to be in the numerical range as defined in claim 12 for at least the following reasons:

i. If the width of the groove is smaller than 0.2  $\mu\text{m}$ , the desired effects cannot be obtained. Therefore, the width of the groove is preferably 0.2  $\mu\text{m}$  or more.

ii. If the width of the groove is larger than 2  $\mu\text{m}$ , the depth of the groove is likely to become larger than 2  $\mu\text{m}$ . If the depth of the groove is larger than 2  $\mu\text{m}$ , a rupture is likely to occur in the groove portion when the second spacer portion deforms. Therefore, in order to avoid such a situation, the width of the groove is preferably 2  $\mu\text{m}$  or less.

iii. If the width of the groove is larger than 2  $\mu\text{m}$ , the overall structure becomes too large, which is disadvantageous. Therefore, the width of the groove is preferably 2  $\mu\text{m}$  or less.

Therefore, claim 12 as amended is submitted to be allowable over Miyazaki and Kijima for at least this reason.

Dependent claims 14-17 are allowable for the reasons set forth above with regards to claim 12 at least based on their dependency on claim 12.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 12 and 14-17 under 35 U.S.C. § 102(b).

Reconsideration and allowance of claims 12 and 14-17 are respectfully requested for at least these reasons.

## Conclusion

Therefore, for at least these reasons, all claims are believed to be distinguishable over Miyazaki and Kijima, individually or in any combination. It has been shown above that the cited references, individually or in combination, may not be relied upon to show at least these features. Therefore, claims 4, 12, and 14-17 are distinguishable over the cited references.

In view of the above remarks and amendments, it is believed that the pending application is in condition for allowance.

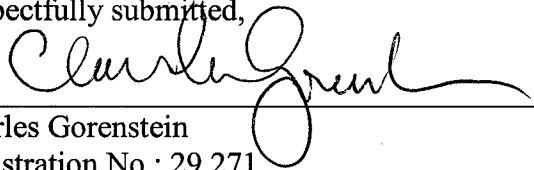
Applicants respectfully request that the pending application be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Aslan Ettehadieh Reg. No. 62,278 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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